

Rocky Flats Cleanup Commission

11/9/84

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881 Hillside Cleanup Overview

Summary of Key Points (Excerpted from Briefing Packet I from Concerned Health Technicians For A Cleaner Colorado (CHTFACC))

Comments on the Proposed 881 Hillside Interim Remedial Action (prepared by Paula Eloffson-Gardine from RFCC and CHTFACC)

RFCC Press Release Regarding the Interim Remedial Action for 881 Hillside (Prepared by Joe Tempel for RFCC)

1-800-441-1234/UCNI
By Paula Eloffson-Gardine
Date 11/9/84

Rocky Flats Cleanup Commission

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It is unclear when the permanent solution for these 12 sites will be in place because no schedule has been produced by DOE. This schedule is to be outlined in an Intergovernmental Agreement (IGA) which was due in October. In fact the permanent solution has been under study since 1987 when work began on the Remedial Investigation/Feasibility Study 881 Hillside. These reports have still not been completed because of the inadequacies in the draft reports. The following inadequacies were identified by the DOE Special Assignment Environmental Team in their Report entitled "Assessment of the Environmental Conditions at the Rocky Flats Plant", dated August 1989:

There is inadequate background characterization for metals and radionuclides primarily because there was only one background well drilled up gradient of the site to determine what contamination is being generated on-site versus off-site.

There is a poorly defined extent of contamination because of the few number of test wells (33).

There is inadequate quality control of testing so the data may not be valid.

Therefore, DOE admits that their past studies have been flawed and that a permanent solution cannot be defined until one completely understands the problem. The RFCC requests that these inadequacies be corrected as soon as possible so that a final cleanup solution can be implemented.

While the IRA proposes to construct a french drain to collect the pollutants which are leaching into the groundwater, nothing is being proposed to cleanup the contaminated soils. The RFCC is concerned that the citizens and workers downwind of the construction of the drain may be contaminated by the radioactive dust disturbed on the surface of the ground. The RFCC wants to review a Health and Safety Plan which describes how the workers and community will be protected during construction. The RFCC does not want the cleanup to create additional health risks to the workers and the community like that which was experienced at the Rocky Mountain Arsenal. The RFCC also wants adequate monitoring to be in place during construction so that environmental standards are not exceeded.

Finally, the RFCC wants to see a Community Involvement Plan which outlines how the community will be informed of the progress of the cleanup and given assurance that environmental standards are being met.

Rocky Flats Cleanup Commission

11/9/89

DOE Public Comment Hearing

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PRESS RELEASE REGARDING THE INTERIM REMEDIAL ACTION FOR 881 HILLSIDE

The Rocky Flats Cleanup Commission (RFCC), an organization comprised of individuals representing the peace and environmental community, has concerns with the Interim Remedial Action (IRA) for the 881 Hillside Area. The RFCC has representation from the following organizations on their fifteen member board of directors:

The Colorado Coalition for the Prevention of Nuclear War
The Boulder Scientists
Health Technicians for a Cleaner Colorado
Citizens Against Rocky Flats Contamination
National Toxics Campaign
Sierra Club
Committee Against Radiotoxic Pollution
Networking Colorado
Physicians for Social Responsibility
American Friends Service Committee

The RFCC has been meeting for approximately one year. In January they applied for a \$50,000 grant from EPA and received approval in July. In June they incorporated as a non-profit corporation in the State of Colorado. The purpose of the organization is to educate the public about the cleanup of Rocky Flats, a Superfund site. The purpose of the grant is to allow RFCC to hire technical consultants to help them critically review public documents pertaining to the cleanup. The information would then be transmitted to the public via press releases, press conferences, statements at public hearings, newsletters, and public meetings. The members of RFCC are not only concerned citizens, but they are also professionals in their fields of law, engineering, environmental planning, meteorology, medicine and waste management. After having reviewed the IRA for 881 Hillside, the RFCC has the following concerns:

First of all, the public should be aware that this document describes the cleanup of only 12 of the 166 polluted sites at Rocky Flats. These sites contain cancer-causing volatile organic compounds and uranium tainted soils that have leached into the groundwater. These sites have been given priority for cleanup because the volatile organic compounds have percolated down to the groundwater which enters Woman's Creek which drains into Stanley Reservoir, the drinking water supply for the northern suburbs. To put this cleanup proposal in another perspective; it will cost approximately \$6 million to construct and operate compared to an estimate of \$1 billion to cleanup the entire plant site. Therefore, while the RFCC is very excited that cleanup is finally progressing, this action is only the tip of the iceberg; or should we say the tip of the trash pile.

The public should also be aware that cleanup will take a very long time at the rate DOE is progressing. The purpose of the IRA is to begin cleanup on a temporary basis until a permanent solution can be agreed upon. Unfortunately, the temporary solution will not be operational until the Spring of 1991, about a year and a half away from now. This is not acceptable. Cleanup should be accelerated at the plant.

THE ENVIRONMENTAL ASSESSMENT OF THE ROCKY FLATS NUCLEAR RESEARCH PLANT

DOCUMENT TITLE: Proposed Interim Measures/Interim Remedial Action
Plan and Decision Document: 881 Hillside Area,
High Priority Sites

AUTHOR/SOURCE: U.S. Department of Energy, Rocky Flats Plant, Golden, CO
Rockwell International, Aerospace Operations, RFP
October 1989

SUMMARY OF KEY POINTS:

The 881 Hillside is comprised of 12 identified contamination areas consisting mainly of chemical contaminants such as solvents and volatile organic compounds. The Comprehensive Environmental Assessment and Response Program (CEARP) from 1986 marked the initiation of what is known now as the Environmental Restoration Program. Under CEARP, 166 sites were identified as contaminated that would require remediation. There has been at least 4 different 2-volume versions describing this area, and the proposed techniques for remediation, the last two versions having been released in September of 1989, then October of 1989.

The main scheme for remediating the 881 Hillside as it now stands is the construction of an elaborate french drain system that is to collect contaminated ground water. The contaminated water is to be routed to a specially designed treatment system that will subject the water to carbon adsorption, UV/Peroxide treatment, air stripping, ion exchange, electrodialysis, and reverse osmosis treatment. Other alternatives proposed included total encapsulation of the site, and the construction of a foundation drain with a well to collect the contaminants. With the foundation drain plan, the water would receive minimal treatment, then be discharged down an interceptor ditch downgradient from 881. The french drain proposal is the preferred alternative indicated.

Contaminants of note found in alluvial and ground water monitoring wells include extremely high levels of VOC's, some minerals, reactive metals, and radionuclides. Those seen in highest concentrations included: carbon tetrachloride, 1,1-dichloroethane, 1,2-dichloroethane, 1,1-dichloroethene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethene, antimony, cadmium, chromium, copper, iron, manganese, mercury, nickel, selenium, thallium, and zinc. Gross alpha and gross beta radiation readings were also high, with plutonium, strontium-90, tritium, and uranium being the radionuclides of note.

There has been deep concern regarding this site because of the migration of VOC's toward tributaries that feed public drinking water supplies. The Rocky Flats Plant was ranked #1 amongst the DOE facilities for cleanup during a system-wide environmental audit done by the DOE in September of 1988 because of this problem, and because of the proximity of the local communities.

354pp LENGTH OF DOCUMENT

96hrs NUMBER OF HOURS FOR RESEARCH AND FOLLOW-UP

 PAGES OF NOTE ATTACHED

3pp ADDITIONAL COMMENTS, CRITIQUE, OR PERTINANT CORRESPONDANCE ATTACHED

RESEARCHED BY PAULA ELOFSON-GARDINE

Concerned Health Technicians
Golden, Colorado

881-1-2

Rocky Flats Cleanup Commission

11/9/89 DOE PUBLIC COMMENT
HEARING

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Comments on the proposed 881 Hillside IRA

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The lack of upgradient wells indicates deficiency regarding "background" levels of contaminants versus those found in aluvial measurements and groundwater wells in the area known as the 881 Hillside.

There is serious deficiency regarding lack of chemical and radionuclide direct soil analysis both on and offsite for the determination of spread of contaminants originating from the Rocky Flats Plant.

Sources of contaminants are not identified, so that an eventual permanent solution could be initiated. As an interim measure, the peroxide/UV application for destruction of VOC's is controversial, and has not been "proven" for remediations of this size. The benefit of this technology is questionable in terms of the volume it is capable of handling.

In comparing the site diagrams of the Proposed Interim Measures/IRA Plan and Decision Document for the 881 Hillside area, the 903 Pad, Mound, and East Trenches Remedial Investigation, and the Rocky Flats Plant site map in the Assessment of Environmental Conditions at the Rocky Flats Plant report, it appears that the area blocked out for 881 remediation encroaches in part on the 903 Pad area. If this is so, how will the public be protected during the remediation process from the radionuclides liberated from this process? Resuspension is a problem.

Migration from the 903 area to the 881 area is not addressed as a possible source of contaminants. The 886 building is adjacent to the 881 area as well. Where do the discharges from this building drain to? A chart detailing groundwater migration and the plant piping system and drains would assist in determining sources and potential toxicity.

No mention is made regarding protection of the community during remediation activities. Historically, monitoring of this area has shown elevated readings of radionuclide activity during these types of activities (eg: barrel removal). Please see report # RFP-3914, Dust Transport-Wind and Mechanical Resuspension. We would suggest a containment structure such as temporary buildings and/or domes be used to contain contaminants that are disturbed during cleanup phases of note such as drilling, earthmoving and the like.

There is a lack of dispersion modeling for migration of plumes of contamination that would also assist in the identification of sourcepoints of many of the contaminants in question.

Respectfully Submitted,

Paula Eloffson-Gardine

Paula Eloffson-Gardine, Director
Concerned Health Technicians For A Cleaner Colorado
Secretary, Rocky Flats Cleanup Commission

NO RISK ANALYSIS
DONE, NOR ANY
CONSIDERATION OF
SYNERGISTIC
EFFECTS OF TOXICS

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